#### **FARM MANAGEMENT**

#### 5022

**CIP Code: 01.0104** 

Farm Management is a year long course that introduces students to the principles of farm organization and management with the utilization of technology. It covers the effects of good and poor management on a farm, economic principles, decision-making, methods for organizing and planning, getting started in the farming business, farm record keeping, risk management, and career opportunities in the field of farm management.

- Suggested Grade Levels: 11-12
- Recommended Prerequisite: Fundamentals of Agricultural Science and Business or permission of the teacher
- A two credit/two semester course.
- A Core 40 directed elective as part of a technical career area.
- This course qualifies as an Academic Honors Diploma elective.
- Competencies and learning activities defined.
- This course is included as a component of the Agriculture and Natural Resources career cluster and may also be included as a component of the Business, Management and Finance career cluster.

#### **Farm Management**

### A-1. Students shall examine management in and the importance of decisions on the operation of a farm.

- 1. Describe the management process.
- 2. Identify the basic resources utilized in management.
- 3. Understand how good management can make a considerable difference in the profitability of a farm.
- 4. Analyze the differences in farm and non-farm management.

### A-2. Students shall examine goal setting and the importance of setting both personal and farm goals.

- 1. Explain the importance of goal setting in farm management.
- 2. Distinguish the characteristics of an achievable goal.
- 3. Outline the areas of goal attainment.
- 4. Differentiate between short-term and long-term goals and discuss their interrelationship.
- 5. Understand the process utilized in setting goals.
- 6. Establish and evaluate personal and professional goals.

## B. Students shall analyze basic economic principles and their relationship to farm management.

1. Analyze, explain, and provide examples of the applications of basic economic principles to farm management.

## C-1. Students shall be able to describe the decision-making process and the steps involved, as they apply to farm management.

- 1. Identify that a problem exists.
- 2. Examine the importance of setting priorities in management.
- 3. Recognize and evaluate the impact that decision making has on the day-to-day operations of a farm.
- 4. Identify the steps in problem solving methods.

#### C-2. Students shall analyze the role of budgets as a tool used for decision making.

- 1. Explain the importance of a budget.
- 2. Identify the best sources of information to use when formulating a budget.
- 3. Differentiate between the following kinds of budgets and analyze the value of each:
  - a. Partial
  - b. Enterprise
  - c. Cash Flow
  - d. Total Farm
  - e. Linear Programs

### D-1. Students shall analyze, explain, and utilize one of the available methods to organize and plan a farm business.

- 1. Evaluate the factors that affect farm profit.
- 2. Explain the effects that enterprise choice can have on a farm.
- 3. Evaluate crop, livestock, labor, and power efficiency.
- 4. Recognize the methods utilized in measuring and increasing farm size.
- 5. Explain why larger volume operations are more efficient.
- 6. Explore the advantages or disadvantages to alternative agriculture production and value-adding enterprises.

#### D-2. Students shall analyze the different cropping systems utilized by farm managers.

- 1. Analyze each crop that could be used in the farming program.
- 2. Describe the advantages and disadvantages of crop rotations.
- 3. Demonstrate the use of soil maps in establishing a cropping program.
- 4. Diagram the most efficient layout of fields and the farming practices which should be utilized.
- 5. Examine the feasibility of double cropping for the local area.
- 6. Identify the philosophy behind the current government program.
- 7. Identify the various resources that can be utilized in planning a cropping program—both government and non-government.
- 8. Describe the interrelationship between tillage systems and cropping systems.

### D-3. Students shall examine the concepts involved in fertility planning and pest management.

- 1. Explain the importance of proper fertilization and pesticide use.
- 2. Analyze the various processes by which soils lose nutrients.
- 3. Evaluate the importance of soil testing in a fertility program.
- 4. Describe the factors which affect the amount of fertilizer applied to a field.
- 5. Evaluate the various management systems which relate to fertility planning and pest management.
- 6. Analyze the advantages and disadvantages of each management system.
- 7. Evaluate the various methods utilized in reduction of fertilizer costs.
- 8. Identify the major factors that influence the use of pesticides.
- 9. Describe the steps involved in selecting a chemical pesticide.

### D-4. Students shall determine the factors involved in developing a livestock program.

- 1. Evaluate the advantages and disadvantages of integrating livestock production into a farming program.
- 2. Identify the factors that determine the type of livestock to produce on a specific farm.
- 3. Evaluate the economic characteristics of raising the various types of livestock.
- 4. Explain the factors involved in deciding upon the number of livestock to raise on a farm.
- 5. Analyze the advantages and disadvantages of specialization.
- 6. Identify the factors utilized in selecting the type and amount of livestock for a specific farm.

### D-5. Students shall identify the process used to select and design the buildings necessary for a farming operation.

- 1. Explain the factors that make investment in buildings unique.
- 2. Compare and contrast high investment, low labor buildings and low investment, high labor buildings.
- Analyze the factors which should be considered when deciding to add new buildings.
- 4. Assess the advantages and disadvantages of the following alternatives to new building construction:
  - a. Remodel old buildings
  - b. Providing your own labor versus hiring the construction done
  - c. Renting buildings

- 5. Identify the cash flow needs in building construction.
- 6. Explain and demonstrate how to calculate the ownership costs of buildings.

## D-6. Students shall investigate the decisions utilized in the management of agricultural machinery and equipment.

- 1. Evaluate the factors to consider when selecting the amount and size of equipment to purchase.
- 2. Identify and explain the costs involved in owning and using machinery.
- 3. Evaluate the following management problems as they relate to machinery:
  - a. Deciding when to trade
  - b. New versus used machinery
  - c. Custom work
  - d. Joint ownership of machinery
  - e. Leasing machinery
- 4. Identify the factors that farm managers can utilize in reducing costs and improving the efficiency when using machinery.

#### D-7. Students shall examine the methods utilized and their importance in managing farm labor.

- 1. Explain the importance of labor management and labor efficiency.
- 2. Identify the factors to consider when deciding to add more labor to the farm business.
- 3. Identify the methods used in finding and retaining good farm labor.
- 4. Compare and contrast the various types of incentive plans.
- 5. Identify the methods which can be used in order to comply with the various farm labor laws.

## E-1. Students shall explore the factors to consider when making the decision to join the family farm.

- 1. Analyze the family farm business to determine whether or not it is capable of providing sufficient income for two or more families.
- 2. Explain the following methods of sharing income:
  - a. Wages
  - b. Wages plus sharing of profits
  - c. Partnership
  - d. Corporation
- 3. Explain the importance of written contracts.
- 4. Assess the factors that may affect a person's entry into the family farm business.

- 5. Explain the role of record keeping in any farm agreement.
- 6. Identify the necessity for estate planning.

## E-2. Students shall identify and evaluate the factors which need to be considered when renting land.

- 1. Evaluate the advantages and disadvantages of renting land compared to land ownership.
- 2. Identify and explain the factors involved in a good landlord-tenant relationship.
- 3. Analyze the different types of lease agreements.
- 4. Describe the importance of providing a fair lease agreement and identify the methods used to produce such an agreement.

#### E-3. Students shall identify and evaluate the factors to consider when buying a farm.

- 1. Identify and assess the various methods of land appraisal.
- 2. Identify the factors to consider and evaluate the economic feasibility of buying land.
- 3. Evaluate the factors which should be considered before purchasing a farm.
- 4. Describe the steps involved in buying land.
- 5. Determine the necessary steps to take when closing the sale.
- 6. Describe the different types of deeds.
- 7. Evaluate the two methods of financing land purchases.

# F-1. Students shall recognize the importance of keeping records and identify the kinds of records which should be kept.

- 1. Analyze the various reasons for farmers to keep records.
- 2. Describe the following kinds of records:
  - a. Balance sheet
  - b. Profit/loss statement
  - c. Cash flow statements
  - d. Enterprise accounts
  - e. Production records
  - f. Personal records
  - g. Hired labor records
  - h. Inventory

### F-2. Students shall recognize the importance of and become adept in the manipulation of data bases and filing systems.

- 1. Analyze the concept and compare the differences between data bases and filing systems.
- 2. Examine the necessity for data management.

#### F-3. Students shall identify and explain the uses for computer hardware and software.

- 1. Compare and contrast the differences between computer hardware and software.
- 2. Identify hardware and software and explain how they are utilized.

### F-4. Students shall recognize the importance of and become adept in the utilization of a word processing system.

- 1. Explain the concept of word processing.
- 2. Define the basic word processing functions.
- 3. Demonstrate the uses of a spell check.
- 4. Discuss the advantages and disadvantages of using word processors as contrasted to using other modes of written communication.

## F-5. Students shall recognize the importance of and become adept in the use of spreadsheets.

- 1. Identify and explain the objectives of spreadsheets.
- 2. Describe the basic elements of a spreadsheet.
- 3. Identify and explain the functional commands used to construct and manipulate a computer spreadsheet.

#### G-1. Students shall recognize and analyze the impact of the various kinds of risks.

1. Identify, explain, and provide examples of the various kinds of risks involved in farm management.

#### G-2. Students shall assess the importance of insurance as it is used to reduce risks.

- 1. Identify and provide examples of risk and loss and their relationship to insurance.
- 2. Define liability and property insurance.
- 3. Assess the importance of life and health insurance to a farm operation.
- 4. Identify and evaluate the reasons for having crop insurance.
- 5. Utilizing a cash flow projection, compute the amount of insurance that a operation would need.
- 6. Explain the Government Commodity Program.

#### G-3. Students shall investigate a market plan to reduce risks.

- 1. Explain the importance of planning a market strategy.
- 2. Evaluate the affect that a small change in price would have upon net farm profits.
- 3. Identify and discuss the factors which affect the supply and demand of farm products.
- 4. Determine how price is discovered.
- 5. Evaluate and explain how to utilize the following in reducing price risks in farming:
  - a. Forward cash contracts
  - b. Hedging
  - c. Options

#### G-4. Students shall investigate the use of credit to reduce risks.

- 1. Assess the importance of good credit to farming.
- 2. Identify and explain the principles of good credit use.
- 3. Compare and contrast the various types of credit.
- 4. Evaluate the various methods of interest calculators.
- 5. Identify the characteristics that creditors look for in borrowers.
- 6. Identify and evaluate the various sources of farm credit.

#### H. Students shall assess and evaluate a complete farming operation.

- 1. This unit is intended to be used in one of the following ways:
  - a. As a final exam for the course
  - b. As a review for a final exam
  - c. As preparation for a State and/or National Farm Business Management Contest